



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

3W

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,071	08/18/2003	Paul Lum	10004024-2	4192

7590 12/28/2004

AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

RODRIGUEZ, WILLIAM H

ART UNIT PAPER NUMBER

3746

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

8N

Office Action Summary	Application No. 10/643,071	Applicant(s) LUM, PAUL	
	Examiner William H. Rodriguez	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,4,5 and 7-14 is/are allowed.
- 6) ☒ Claim(s) 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the amendment and remarks filed 10/12/04. Since the examiner has applied new grounds of rejection, this office action is being made non-final to afford the applicant the opportunity to respond to the new grounds of rejection.

Drawings

1. The drawings filed on 10/12/04 have been approved.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kamholz et al.** (U.S. 6,415,821) in view of **Sudor** (U.S. 6,709,692).

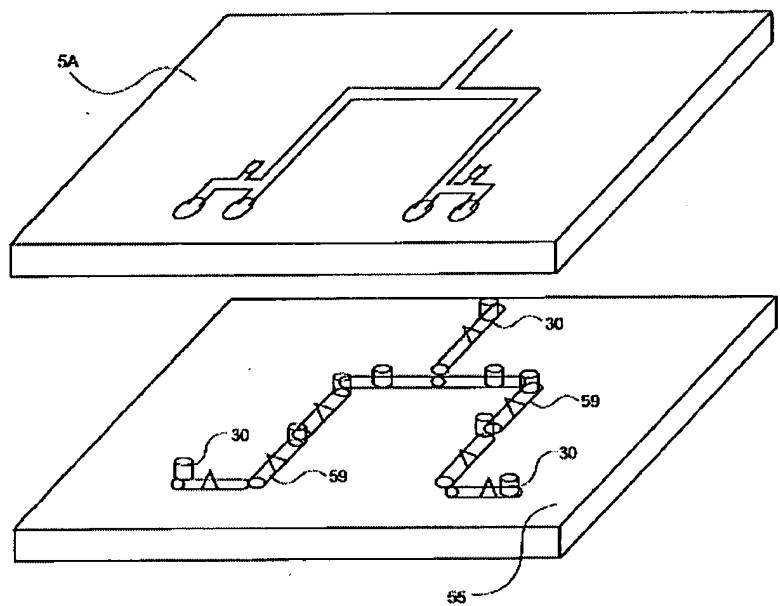


FIG. 6A

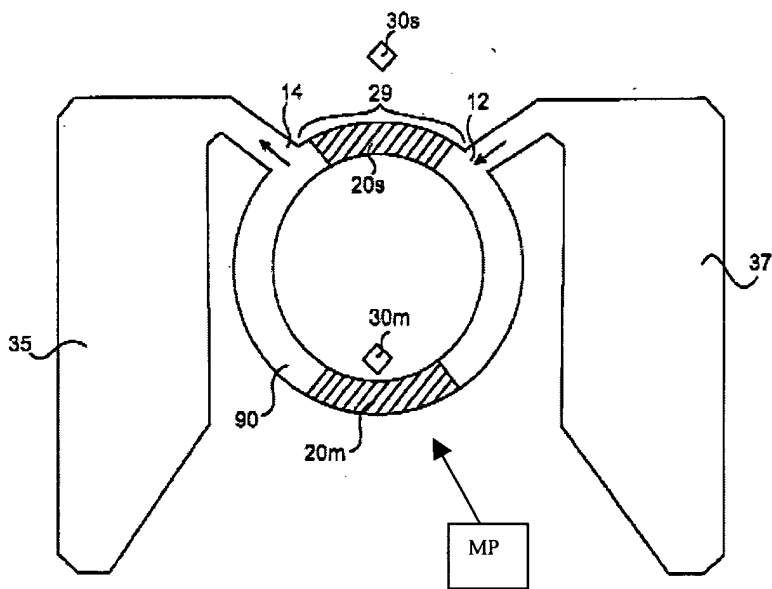


FIG. 10

Kamholz teaches a 5A, 55 cartridge comprising: a network of conduits 12, 14 and reservoirs 35, 37 within said cartridge, at least one micro-pump MP fluidly coupled to said network for transporting small volumes of biological fluid, said pump comprising: a rotatable portion having a magnetic core 30m and configured to be rotatable by alternating inductive magnetic fields to urge fluid through said network. **Kamholz** does not teach that the cartridge is disposable. However, it was well known in the art at the time the invention was made to use disposable cartridges (for biological fluid handling devices) to prevent the transfer of infectious diseases from one patient to another through a contaminated cartridge. Further, **Kamholz** does teach that the rotatable portion has a hydrophobic surface. However, **Sudor** teaches that the binding of valuable material (i.e., proteins, cells, platelets, etc) to surfaces of blood handling devices is of major concern for biological fluid handling devices because it can result in the loss of valuable material and variations in the amount of the dispensed fluid to the patient. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the rotatable portion of Kamholtz's micro-pump of a hydrophobic material to prevent binding of valuable organic material to the rotatable portion of the pump in order to ensure that the patient receives all the valuable organic material he/she needs. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used disposable cartridges for Kamholz's device when handling biological fluids to prevent the transfer of infectious diseases from one patient to another through a contaminated cartridge. See particularly abstract, column 9 lines 25-37, **Figures 6A, 10**, column 1 lines 22-24 of Kamholz; and column 1 lines 35-41 of Sudor.

Art Unit: 3746

Note: With regards to the intended use recitation “that operates in conjunction with a point-of-care analytical device”, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In the instant case, the **Kamholz-Sudor** device could be used in conjunction with point-of-care analytical device. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Allowable Subject Matter

4. Previously objected claims 2 and 8 have been re-written in independent form. Thus, claims 2, 8 and its dependent claims are allowed.

Previously objected claim 10, has been amended to overcome the rejection under 35 U.S.C. 112, second paragraph. Thus, claim 10 and its dependent claim are allowed.

The indicated allowability of claim 3 is withdrawn in view of the newly discovered reference(s) to **Sudor (U.S. 6,709,692)**. See rejection above.

Response to Arguments

5. Applicant's arguments with respect to claim 3 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3746

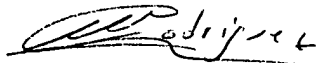
Examiner would favorably consider the case in condition for allowance if the following limitation is added to claim 3, wherein said rotatable portion comprises a microscopic paddle wheel having a hydrophobic surface.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William H. Rodriguez
Examiner
Art Unit 3746